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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/045,799	03/23/1998	HIDEYUKI HAYASHI		1410

7590                    01/15/2002  
SUGHRUE MION ZINN MACPEAK & SEAS  
2100 PENNSYLVANIA AVENUE N W  
WASHINGTON, DC 20037

EXAMINER
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TAMAI, KARLI

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 01/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

09/045,799

**Applicant(s)**

HAYASHI ET AL.

**Examiner**

Tamai IE Karl

Art Unit

2834

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 06 December 2001.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-6 and 9-14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6 and 9-14 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## **DETAILED ACTION**

The examiner has withdrawn the finality of the rejection of the last Office action based on the IDS filed 12/6/01.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Waratani et al.(Waratani)(JP 4-64414). Warantai teaches a conductor with an outer frame16 and a wiring section 1, where the wiring section having a deformation preventer 2 under the resin 3.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al.(Waratani)(JP 4-64414), in further view of Huber. Waratani teaches every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in

the arts at the time of the invention to construct the insert conductor of Waratani in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al.(Waratani)(JP 4-64414), in further view of Yoshida. Byrne and Nakazawa teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshihida teaches that polyphenylene sulfide is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of Byrne with the deform preventer made of polyphenylene sulfide resin because Yoshihida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property.

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Waratani et al.(Waratani)(JP 4-64414). The Applicant's admitted prior art teaches every aspect of the invention, as discussed above, except an insulating member to prevent the conductor from being deformed by resin injection during the resin molding. Waratani teaches an insulating member 2 to prevent the conductor from being deformed by resin injection during the resin molding It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art with the premold of

Waratani to support the conductor within the resin mold during the injection molding process.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art(AAPA) and Waratani et al.(Waratani)(JP 4-64414), in further view of Huber. AAPA and Waratani teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of AAPA and Waratani in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art(AAPA) and Waratani et al.(Waratani)(JP 4-64414), in further view of Yoshida. Waratani and AAPA teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshihida teaches that polyphenylene sulfide is used in is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of AAPA and Waratani with the deform preventer made of polyphenylene sulfide resin because Yoshihida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property.

9. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al.(Byrne) and Nakazawa et al.(Nakazawa). Byrne teaches a conductor having a plurality of wires 17, an outer frame 18 and connections 17b, and a plastic plate 13 which supports the plurality of wires in the encapsulated body. The plastic plate 13 inherently helps prevent deformation of the wires during encapsulation in an insulating body. Byrne teaches the wires are encapsulated in plastic. Nakazawa teaches an insert conductor which is encapsulated by resin insert molding. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of Byrne in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body, and with the plastic plate of Byrne because it provides insulating support to the used.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne and Nakazawa, in further view of Huber. Byrne and Nakazawa teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Byrne teaches an encapsulated wiring device with the internal wires having an insulating support. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of Byrne in a brush holder because Huber teaches that insert conductors with are molded into

brush holders to form an integrated body, and with the plastic plate of Byrne because it provides insulating support to the wires.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne and Nakazawa, in further view of Yoshida. Byrne and Nakazawa teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshihida teaches that polyphenylene sulfide is used in is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of Byrne with the deform preventer made of polyphenylene sulfide resin because Yoshihida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property.

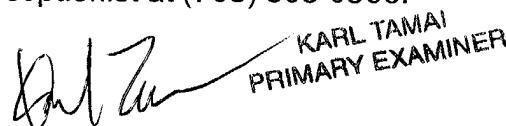
12. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Murata. The Applicant's admitted prior art teaches every aspect of the invention, as discussed above, except an insulating member to prevent the conductor from being deformed by resin injection during the resin molding. Murata teaches an insert conductor for a magnetic device which has a resin premold to help support the conductors molded in an injection molded resin to provide a skeletal framework for the components which are to be injection molded. It would have been obvious to a person skilled in the art at the time of the invention to construct the brush

holder of the Applicant's admitted prior art with the premold of Murata to support the conductor within the resin mold during the injection molding process.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Murata, in further view of Barber et al.(Barber). The Applicant's admitted prior art and Murata teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Barber teaches that polyphenylene sulfide is a suitable material for constructing brush holders. It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art and Murata with the brush holder made of polyphenylene sulfide resin because Barber teaches that polyphenylene sulfide resin provides a EMI/RFI suppression.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066. The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703)308-1371. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist at (703) 308-0956.

Karl I Tamai  
PRIMARY PATENT EXAMINER  
January 15, 2002

  
KARL TAMAI  
PRIMARY EXAMINER